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EXAMINER PONIKIEWSKI, TOMASZ				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/607,812

Applicant(s)

MILLIGAN ET AL.

Examiner

Tomasz Ponikiewski

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-36, 44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 3-36, and 45 is/are rejected.
- 7) ☐ Claim(s) 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 2/14/2008 has been received and entered. New claims 44-45 have been added. Therefore claim 1, 3-36 and 44-45 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-36 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (US PUB 2004/0093326 A1) in view of Copperman et al. (U.S. 6,711,585 B1) and further in view of Szabo (US 7,181,438 B1).

As per claim 1 Carson et al is directed to a computing environment that includes a network connected client and server database with services organized in a taxonomy, a method for the server database to obtain web service information for one or more web services represented at different nodes in the taxonomy, the method comprising:

receiving a request for web service information, the user entered reference node identifier identifying a specified web service represented at a reference node within the taxonomy, the relationship data indicating that any related web service in any taxonomy having either first or second specified hierarchical relationship with the specified web

service is a related web service of interest to the user (page 3, paragraph 0025; page 4, paragraph 0032, lines 4-5; page 7, paragraph 0071; page 7, paragraph 0072, lines 6-7; page 7, paragraph 0074, lines 2-4);

querying one or more databases in a plurality of different taxonomies located on one or more different computer systems using the relationship data to obtain web service information for web services having at least one of the first and the second specified hierarchical relationship with the specified web service of the reference node, the web service information being presentable in a hierarchical format, the hierarchy being based on the specified web service's hierarchical relationship with the reference node and other web services nodes in the plurality of different taxonomies, the nodes of each database comprising at least one of a plurality of root nodes (figure 2A; page 6, paragraph 0056, lines 8-9; page 7, paragraph 0068, page 7, paragraph 0070, lines 3-10);

receiving web service information that corresponds to any related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node in response to the query, the received web service information including the specified web service of the reference node and at least one related web service being displayable in a navigable taxonomy (figure 2a; page 3, paragraph 0025, lines 3-5; page 5, paragraph 0048; page 7, paragraph 0068); and

returning the received web service information to the client, the received web service information for graphical presentation at the client to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node (page 5, paragraph 0048).

Carson et al. does not teach the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node.

Copperman et al. teaches the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node (Copperman et al., column 30, lines 66-67; column 31, lines 1-16, wherein the "reference node identifier" could be the "taxonomy tag" and "relationship data" could be the "taxonomic restrictions")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node because narrowing the request helps user in refining the request and generate better result.

Carson et al. does not teach having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node.

Copperman et al. teaches having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node (Copperman et al., column 30, lines 66-67; column 31, lines 1-16, wherein the "reference node identifier" could be the "taxonomy tag" and "relationship data" could be the "taxonomic restrictions").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node because narrowing the request helps user in refining the request and generate better result.

Carson et al. does not explicitly teach relationship data.

Carson et al. teaches inherently that a tree structure has a defined relationship between parent nodes and child nodes as any hierarchical structure does. However Copperman et al. teaches relationship data (Copperman et al., column 30, lines 66-67; column 31, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include relationship data because the tags help user in refining the request (Copperman et al., column 30, lines 64-65).

Carson et al. does not teach extracting the reference node identifier and the relationship data from the request.

Copperman et al. teaches extracting the reference node identifier and the relationship data from the request (column 30, lines 23-22)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include extracting the reference node identifier and the relationship data from the request because extracting relevant information is helpful in searching.

Carson et al. as modified still does not teach web service being displayable in a navigable taxonomy.

Szabo teaches web service being displayable in a navigable taxonomy (Szabo, column 17, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to web service being displayable in a navigable taxonomy because the user has a choice of navigating to the desired service.

Carson et al. as modified still does not teach the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies.

Szabo teaches teach the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies (Szabo, column 69, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to include the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies because the format shows the user a path to the requested information.

As per claim 3 Carson et al. as modified is directed to the relationship data indicates a root node relationship, and wherein returning the web service information in response to the request comprises returning an identifier of at least one root node within the taxonomy (Carson et al., page 2, paragraph 0010, lines 6-14).

As per claim 4 Carson et al. as modified is directed to returning the web service information in response to the request comprises identifying the relationship along with each other node identifier that corresponds to the relationship data (Carson et al., page 2, paragraph 0010, lines 6-14).

As per claim 5 Carson et al. as modified is directed to wherein returning the web service information in response to the request comprises returning at least one other node identifier that corresponds to the relationship data (Carson et al., page 7, paragraph 0073, lines 2-7).

As per claim 6 Carson et al., as modified is directed to the relationship data indicates a parent relationship (Carson et al., figure 2a, wherein retrieval (244) is parent of healthcare(261)).

As per claim 7 Carson et al., as modified is directed to the relationship data indicates a child relationship (Carson et al., figure 2a, wherein healthcare (261) is child of retrieval (244)).

As per claim 8 Carson et al., as modified is directed to returning the web service information in response to the request comprises returning an identifier of another taxonomy (Carson et al., page 7, paragraph 0068, lines 10-12).

As per claim 9 Carson et al., as modified is directed to returning the web service information in response to the request further comprises returning at least one node identifier corresponding to at least one node in another taxonomy (Carson et al., page 7, paragraph 0068, lines 7-10).

As per claim 10 Carson et al., as modified is directed to the relationship data indicates an equivalence relationship (Carson et al., figure 2a wherein healthcare (261) and banking (260) are on the same level in the taxonomy).

As per claim 11 Carson et al. as modified is directed to returning the web service information in response to the request further comprises returning at least one attribute value that indicates whether a node corresponding to that attribute value comprises a classification node (Carson et al., page 7, paragraph 0072, lines 3-6).

As per claim 12 Carson et al. as modified is directed to returning the web service information in response to the request further comprises returning at least one text string (Carson et al., page 5, paragraph 0048, second column, lines 9-10).

As per claim 13 Carson et al. as modified is directed to the request includes at least one other reference node identifier and relationship data, and wherein the response returns data corresponding to the request in the order in which the reference node identifier and relationship data were received such that the first set of reference node identifier and relationship data corresponds to a first part of the response and the at least other set of reference node identifier and relationship data corresponds to a second part of the response. (Carson et al., page 7, paragraph 0068; page 7, paragraph, 0073, lines 1-4; Copperman et al. column 31, lines 1-22).

As per claim 14 Carson et al. as modified is directed to the request comprises an XML message, and wherein returning the web service information in response to the request further comprises formatting the response as an XML message (Carson et al.,

page 4, paragraph 0040, lines 5-7, wherein transportation could mean both request and response).

As per claim 15 Carson et al. as modified is directed to the web service information corresponds to a taxonomy maintained at a UDDI server (Carson et al., page 1, paragraph 0003, lines 6-8; page 7, paragraph 0068, line 1; “a taxonomy” has been introduced previously in claim 1).

As per claim 16 Carson et al. as modified is directed to a recordable-type computer-readable medium having computer-executable instructions configured to execute the method of claim 1 in computer system (see rejection for claim 1, Carson et al., page 5, paragraph 0044, lines 5-7).

As per claim 17 Carson et al. is directed to a computing environment that includes a network connected client and server database with services organized in a taxonomy, a method for the network connected client to obtain web service information for one or more web services represented at different nodes in the taxonomy, the method comprising:

constructing a request for web service information, the user entered reference node identifier identifying a specified web service represented at a reference node within the taxonomy, the relationship data indicating that any related web service in any taxonomy having first or second specified hierarchical relationship with the specified

web service is a related web service of interest to the user (page 3, paragraph 0025; page 4, paragraph 0032, lines 4-5; page 7, paragraph 0071; page 7, paragraph 0072, lines 6-7; page 7, paragraph 0074, lines 2-4);

communicating the request to a server (page 5, paragraph 0048, second column, lines 4-7; page 5, paragraph 0049, lines 12-20);

receiving a response from the server regarding the requested web service data including the specified web service of the reference node and relationship information (figure 2a; page 3, paragraph 0025, lines 3-5; page 5, paragraph 0048; page 7, paragraph 0068); and

graphically displaying web service information that corresponds to any web services having at least one of the first and the second specified hierarchical relationships with the specified web services in a navigable taxonomy configured to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node (page 5, paragraph 0048).

Carson et al. does not teach the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node.

Carson et al. teaches the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship

the requested node is to have with the reference node (Copperman et al., column 30, lines 66-67; column 31, lines 1-16, wherein the "reference node identifier" could be the "taxonomy tag" and "relationship data" could be the "taxonomic restrictions")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node because narrowing the request helps user in refining the request and generate better result.

Carson et al. does not teach indicating at least one of related web service having either the first or the second specified hierarchical relationship with the specified web service.

Copperman et al. teaches indicating at least one of related web service having either the first or the second specified hierarchical relationship with the specified web service (Copperman et al., column 30, lines 66-67; column 31, lines 1-16, wherein the "hierarchical relationship" could be the "taxonomic restrictions").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node because narrowing the request helps user in refining the request and generate better result.

Carson et al. does not explicitly teach relationship data.

Carson et al. teaches inherently that a tree structure has a defined relationship between parent nodes and child nodes as any hierarchical structure does. However Copperman et al. teaches relationship data (Copperman et al., column 30, lines 66-67; column 31, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include relationship data because the tags help user in refining the request (Copperman et al., column 30, lines 64-65).

Carson et al. as modified still does not teach graphically displaying web service information

Szabo teaches teach graphically displaying web service information (Szabo, column 17, lines 19-34; Szabo, column 69, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to include the graphically displaying web service information because the format shows the user a path to the requested information.

Carson et al. as modified still does not teach web service being displayable in a navigable taxonomy.

Szabo teaches web service being displayable in a navigable taxonomy (Szabo, column 17, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to web service being displayable in a navigable taxonomy because the user has a choice of navigating to the desired service.

As per claim 18 Carson et al. as modified is directed to the relationship qualifier indicates a root node relationship with the taxonomy, and wherein the response includes information about at least one root node in the taxonomy (Carson et al., page 7, paragraph 0070, lines 7-8).

As per claim 19 Carson et al. as modified is directed to the reference node identifier further includes node identification data from which a node within the taxonomy is operable to be identified (Carson et al., page 7, paragraph 0070, lines 1-3; page 7, paragraph 0071, lines 1-3).

As per claim 20 Carson et al. as modified is directed to the relationship qualifier indicates a parent node of a node identified by the node identification data, and wherein the response includes information about the parent node (Carson et al., page 7, paragraph 0074, line 2).

As per claim 21 Carson et al. as modified is directed to the relationship qualifier indicates a child node of a node identified by the node identification data, and wherein

the response includes information about at least one child node, if any exist (Carson et al., page 2, paragraph 0010, lines 6-14, wherein the child node is in a level below one mentioned in request).

As per claim 22 Carson et al. as modified is directed to the relationship qualifier indicates an equivalent node of a node identified by the node identification data (Carson et al., page 2, paragraph 0010, lines 6-14, wherein the equivalent node is in on the same level as one mentioned in request).

As per claim 23 Carson et al. as modified is directed to receiving the response from the server further includes receiving an attribute value that indicates whether a node in the taxonomy is intended as a classification node (Carson et al., figure 3 (30); page 7, paragraph 72).

As per claim 24 Carson et al. as modified is directed to receiving the response from the server further includes receiving at least one text string that corresponds to a node in the taxonomy (Carson et al., page 5, paragraph 0048, second column, lines 9-10).

As per claim 25 Carson et al. as modified is directed to constructing a request for taxonomy data comprises constructing an XML message (Carson et al., page 4, paragraph 0040, lines 5-7).

As per claim 26 Carson et al. as modified is directed to communicating the request to a server comprises sending the XML message to a UDDI server (Carson et al., page 1, paragraph 0003, lines 6-8; page 4, paragraph 0040, lines 5-7; page 7, paragraph 0068, line 1).

As per claim 27 Carson et al. as modified is directed to a computer-readable medium having computer-executable instructions configured to execute the method of claim 17 in a computer system (see rejection for claim 17, Carson et al., page 5, paragraph 0044, lines 5-7).

As per claim 28 Carson et al. is directed to in a computing environment that includes a network connected client and server database with services organized in a taxonomy, a system that obtains web service information for one or more nodes in a taxonomy, the system comprising:

a request receiving mechanism configured to receiving a request for web service information, the user entered reference node identifier identifying a specified web service represented at a reference node within the taxonomy, the relationship data indicating that any related web service in any taxonomy having either first or second specified hierarchical relationship with the specified web service is a related web service of interest to the user (page 3, paragraph 0025; page 4, paragraph 0032, lines 4-5;

page 7, paragraph 0071; page 7, paragraph 0072, lines 6-7; page 7, paragraph 0074, lines 2-4);

a database querying mechanism configured to query one or more databases in a plurality of different taxonomies located on one or more different computer systems using the relationship data to obtain web service information for web services having at least one of the first and the second specified hierarchical relationship with the specified web service of the reference node, the web service information being presentable in a hierarchical format, the hierarchy being based on the specified web service's hierarchical relationship with the reference node and other web services nodes in the plurality of different taxonomies, the nodes of each database comprising at least one of a plurality of root nodes (figure 2A; page 6, paragraph 0056, lines 8-9; page 7, paragraph 0068, page 7, paragraph 0070, lines 3-10);

a web service information receiving mechanism configured to receive web service information that corresponds to any related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node in response to the query, the received web service information including the specified web service of the reference node and at least one related web service information being displayable in a navigable taxonomy (figure 2a; page 3, paragraph 0025, lines 3-5; page 5, paragraph 0048; page 7, paragraph 0068);
and

a returning mechanism configured to return the received web service information to the client, the received web service information for graphical presentation at the client to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node (page 5, paragraph 0048).

Carson et al. does not teach the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node.

Copperman et al. teaches the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node (Copperman et al., column 30, lines 66-67; column 31, lines 1-16, wherein the "reference node identifier" could be the "taxonomy tag" and "relationship data" could be the "taxonomic restrictions")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include the request including a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node because narrowing the request helps user in refining the request and generate better result.

Carson et al. does not teach having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node.

Copperman et al. teaches having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node (Copperman et al., column 30, lines 66-67; column 31, lines 1-16, wherein the "reference node identifier" could be the "taxonomy tag" and "relationship data" could be the "taxonomic restrictions").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node because narrowing the request helps user in refining the request and generate better result.

Carson et al. does not explicitly teach relationship data.

Carson et al. teaches inherently that a tree structure has a defined relationship between parent nodes and child nodes as any hierarchical structure does. However Copperman et al. teaches relationship data (Copperman et al., column 30, lines 66-67; column 31, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include relationship data because the tags help user in refining the request (Copperman et al., column 30, lines 64-65).

Carson et al. does not teach an extracting mechanism configured to extract the reference node identifier and the relationship data from the request.

Copperman et al. teaches an extracting mechanism configured to extract the reference node identifier and the relationship data from the request (column 30, lines 23-22)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include an extracting mechanism configured to extract the reference node identifier and the relationship data from the request because extracting relevant information is helpful in searching.

Carson et al. as modified still does not teach web service being displayable in a navigable taxonomy.

Szabo teaches web service being displayable in a navigable taxonomy (Szabo, column 17, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to web service being displayable in a navigable taxonomy because the user has a choice of navigating to the desired service.

Carson et al. as modified still does not teach the web service information configured for presentation in a hierarchical format the hierarchy being based on the

specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies.

Szabo teaches teach the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies (Szabo, column 69, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to include the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies because the format shows the user a path to the requested information.

As per claim 29 Carson et al. as modified is directed to the relationship information corresponding to the node in the specified taxonomy comprises a root qualifier (Carson et al., page 2, paragraph 0010, lines 6-14).

As per claim 30 Carson et al. as modified is directed to the relationship information corresponding to the node in the specified taxonomy comprises a parent qualifier (Carson et al., figure 2a, wherein retrieval(244) is parent of healthcare(261)).

As per claim 31 Carson et al. as modified is directed to the relationship information corresponding to the node in the specified taxonomy comprises a child qualifier (Carson et al., figure 2a, wherein healthcare(261) is child of retrieval(244)).

As per claim 32 Carson et al. as modified is directed to comprising a database in which the server maintains the taxonomy data (Carson et al., page 6, paragraph 0056, lines 8-9).

As per claim 33 Carson et al. as modified is directed to the web service requests from the client comprise XML messages (Carson et al., page 4, paragraph 0040, lines 5-7, wherein transportation could mean both request and response).

As per claim 34 Carson et al. as modified is directed to the response to the client comprises an XML message (Carson et al., page 4, paragraph 0040, lines 5-7, wherein transportation could mean both request and response).

As per claim 35 Carson et al. as modified is directed to the server comprises a UDDI server (Carson et al., page 1, paragraph 0003, lines 6-8; page 7, paragraph 0068, line 1).

As per claim 36 Carson et al. as modified is directed to the client provides the request to the server by calling an application programming interface, the application

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programming interface formatting the request as a message for communicating with the server and returning the response to the client in response to the application programming interface call (Carson et al., page 5, paragraph 0049, lines 11-12).

4. Claim 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (US PUB 2004/0093326 A1) in view of Copperman et al. (U.S. 6,711,585 B1) and further in view of Szabo (US 7,181,438 B1) and further in view of Decombe (US 6,888,554 B1)

As per claim 45 Carson et al. as modified does not teach wherein one or more nodes include a flag that when applied to the node, hides the node existence from the user.

Decombe teaches wherein one or more nodes include a flag that when applied to the node, hides the node existence from the user (Decombe, column 9, lines 10-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Decombe to one or more nodes include a flag that when applied to the node, hides the node existence from the user because the hidden nodes might be used for private information where security issues are important.

Allowable Subject Matter

5. Claim 44 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

As per applicant's argument that Copperman et al. does not teach "specifying a reference node and finding other nodes that have specified hierarchical relationship with the reference node" is not found persuasive.

Copperman et al. teaches in column 30, lines 65-67 that the user specifies taxonomy tags, taxonomic restrictions, etc. One of ordinary skill in the art would determine that taxonomy tag could represent a node and the relationship could be represented by taxonomic restriction. Therefore Copperman et al. does teach the specifying a reference node and finding other nodes that have specified hierarchical relationship with the reference node.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571) 272-1721. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571)272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2165

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/T. P./

Examiner, Art Unit 2165

/K. L./

Examiner, Art Unit 2167

/Christian P. Chace/

Supervisory Patent Examiner, Art Unit 2165